

CLAIMS:

What is claimed is:

1. A circuit to divide an electrical resistive load among a plurality of load elements in parallel, comprising:
  - an electrical power source for providing electrical resistive power to a plurality of load elements, wherein the plurality of load elements are connected in parallel to each other; and
  - a plurality of power splitters for dividing the electrical power source into separate and equal power subsources such that there is one power splitter and one power subsouce for each load element,

wherein the power provided to each of the plurality of load elements is equal to the power of the electrical power source.
2. The circuit according to claim 1, wherein the electrical power source is an AC current at a nominal 120 volts.
3. The circuit according to claim 1, wherein the electrical power source is an AC current at a nominal 220 volts.
4. The circuit according to claim 1, wherein the electrical power source is a DC current.
5. The circuit according to claim 1, wherein the plurality of elements comprise two or more heating elements.
6. The circuit according to claim 1, wherein each of the plurality of power splitters comprises a silicon control rectifier.

7. The circuit according to claim 1, wherein the number resistive load elements is 2.

8. The circuit according to claim 1, wherein the number of resistive load elements is more than 2.

9. The circuit according to claim 1, wherein the resistive load elements are fault tolerant such that when one or more resistive load elements fail, the remaining resistive load elements of the plurality of resistive load elements can continue to operate.

10. The circuit according to claim 1, wherein the power splitting is performed according to an AC time proportional wave form.

11. The circuit according to claim 1, wherein the power splitting is performed according to AC phase control.

12. The circuit according to claim 1, including an alarm circuit for activating an alarm when one of the components of the circuit becomes out of specification.

13. The circuit according to claim 1, including a control circuit to proportion the electrical power source with time to match the electrical power to the power subsource to each of the plurality of load elements.

14. A method for dividing an electrical resistive load among a plurality of load elements in parallel, comprising:

providing electrical power to a plurality of load elements, wherein the plurality of load elements are connected in parallel to each other; and

dividing the electrical power into separate and equal power subsources such that there is one power splitter and one power subsource for each load element,

wherein the power provided to each of the plurality of load elements is equal to the power of the electrical power source.

15. The method according to claim 14, including proportioning the electrical power with time to match the electrical power to the power subsources to each of the plurality of load elements.

16. A circuit for dividing an electrical resistive load among a plurality of heating elements in parallel, comprising:

a power supply providing electrical power to a plurality of heating elements, wherein the plurality of heating elements are connected in parallel to each other; and

at least one corrective circuit designed to divide the electrical current from the power supply into separate and equal power subsources such that there is one power subsources for each heating element,

wherein the power provided to each of the plurality of heating elements is equal to the power from the power supply.